

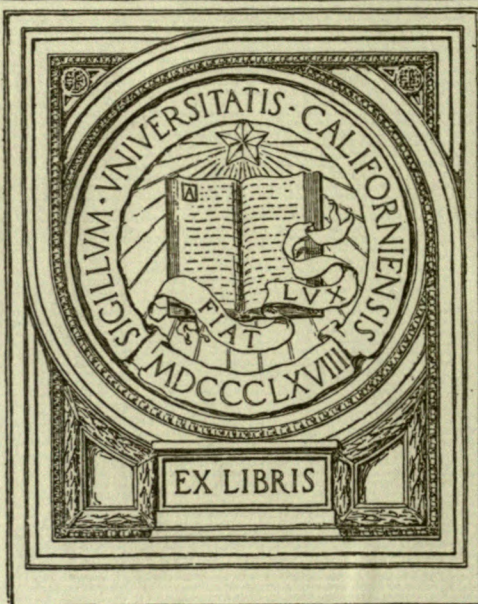
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THE
RAINFALL OF JAMAICA

THIRTEEN MAPS SHOWING THE AVERAGE
RAINFALL IN EACH MONTH AND
DURING THE YEAR

WITH EXPLANATORY TEXT

BY

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*Barrister-at-Law, Jamaica Government Meteorologist, and Honorary Member of the
Institute of Jamaica*



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THE RAINFALL OF JAMAICA.

THESE Maps are based upon rainfall registers kept at 153 stations in Jamaica, from about the year 1870 to the end of the year 1889. A full account of the rainfall during the first decennial period, namely from 1870 to 1879 inclusive, will be found in "Weather Reports" * Nos. 31 and 33; and the numerical details employed in the construction of these Maps will be found in Weather Report No. 124 (A).

It is to be understood, however, that these registers have been kept for very unequal lengths of time; some were commenced before 1870 and have been continued up to the present time; some were commenced about 1870 and have been discontinued; and many were commenced about 1880. But tables will be found in Weather Report No. 124 (A) containing the average rainfall for each station for each month of the year, and for the year itself, where the rainfall has been carefully and regularly observed for at least five years†; and these averages were employed in the formation of the Maps.

The stations are distributed very irregularly: they are for the most part sugar-estates and cattle-pens; so that all the results deduced apply rather to the land under present cultivation than to the general area of Jamaica.

Again, the results are affected by errors due to imperfect gauges, bad positions of the gauges, and carelessness on the part of the observers; but, noticing that such effects on the results obtained from a large number of gauges will remain nearly constant from year to year, the *comparison* of the results from year to year will be nearly free from such effects. Thus we may compare the rainfall in the first decennial period with that in the second decennial period, the amount of error due to these causes being nearly the same in each period.

In consequence of the irregularity in the distribution of the stations, the Island was divided into four rainfall divisions:—North-eastern, Northern, West-central, and Southern. Now, if the average rainfall be obtained for each division, the average rainfall for the whole Island may be obtained by adding together the average for each division and by dividing by four, no matter how many gauges may be registered in one division and how many in another.

We shall now compare the rainfall during the first decennial period with that during the second decennial period, namely from 1880 to 1889 inclusive.

It will be noticed in the following table that although the average rainfall is almost identical in the two periods, namely 67·41 and 66·54 inches respectively, yet the large variations show that this agreement is probably due to chance. The heavy rains in May and October, 1870, in May, 1877, in October, 1879, in

* Published monthly by the Jamaica Government Meteorologist.

† Two or three stations were admitted as exceptions to this rule on account of their geographical importance to the Maps.

THE RAINFALL OF JAMAICA.

THE ISLAND MONTHLY RAINFALL FROM 1870 TO 1889.

YEAR.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	TOTAL.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	
1870	3.99	4.35	3.10	2.79	17.38	3.58	4.33	5.72	8.05	16.74	12.50	6.90	89.43
1871	2.40	1.60	2.29	3.46	6.43	1.98	3.79	3.46	5.70	8.88	5.88	4.22	50.09
1872	3.00	2.84	3.06	2.06	5.18	2.41	2.89	5.24	4.55	6.09	3.13	4.73	45.18
1873	8.15	1.94	5.47	1.15	5.06	2.58	2.56	7.51	10.73	8.57	3.53	5.81	63.06
1874	3.44	2.20	0.61	4.40	10.65	3.96	2.51	9.65	6.82	11.69	10.52	2.49	68.94
1875	2.57	0.67	2.59	3.05	8.54	3.74	3.87	5.13	7.60	5.58	2.34	6.74	52.42
1876	6.00	0.96	1.63	4.68	8.24	5.40	8.15	5.06	5.19	11.36	8.96	5.72	71.35
1877	5.94	1.18	5.38	2.91	15.03	6.50	4.68	1.76	5.01	4.50	7.63	7.88	68.40
1878	6.35	2.80	2.78	0.70	4.86	6.63	5.85	10.80	7.43	11.29	7.32	9.61	76.42
1879	2.81	5.30	6.49	7.28	9.14	10.64	4.47	12.32	7.38	15.96	5.29	1.76	88.84
Means.	4.46	2.38	3.34	3.25	9.05	4.74	4.31	6.66	6.85	10.07	6.71	5.59	67.41
1880	4.36	0.96	1.10	2.77	11.60	3.09	3.86	9.58	3.97	4.00	2.21	7.94	55.44
1881	1.22	4.01	1.30	4.63	10.28	5.56	4.77	6.21	7.68	12.08	7.52	3.34	68.60
1882	2.92	1.93	3.54	3.32	8.22	2.33	3.76	4.80	8.78	8.96	5.36	3.95	57.87
1883	5.49	3.50	4.08	3.34	5.29	4.98	3.15	5.42	7.82	8.15	5.12	2.92	59.26
1884	4.72	3.44	2.51	1.85	6.72	6.89	2.52	5.06	6.23	9.52	5.00	2.44	56.90
1885	1.73	1.49	1.47	4.73	4.90	3.32	3.01	6.19	6.22	6.37	4.74	15.69	59.86
1886	5.23	4.65	2.68	6.39	5.30	23.35	6.22	13.54	5.90	7.98	3.70	5.66	90.61
1887	6.02	2.32	2.38	4.47	9.32	8.89	7.19	6.91	5.77	8.47	8.17	0.75	70.66
1888	1.36	1.89	1.70	3.61	21.24	6.77	2.65	5.47	8.10	4.38	4.59	10.35	72.11
1889	4.78	0.90	4.19	6.71	7.82	12.52	6.08	5.12	8.20	10.49	4.37	2.97	74.15
Means.	3.78	2.51	2.49	4.18	9.07	7.77	4.32	6.83	6.87	8.04	5.08	5.60	66.54

December, 1885, in June, 1886, and in May, 1888, are so far above the average that the results are influenced by these "flood-rains"; and it therefore follows that the average rainfall for any decennial period will depend on the flood-rains experienced in that period. Also that the constancy or variation of the Island rainfall cannot be gathered from two or three decennial periods; a century is required for this purpose.

It also follows that the amount of rain in any year does not afford a true indication of the general prosperity in that or the next year; flood-rains do more harm than good to the general community; and agricultural prosperity depends more upon the way in which the rains fall during the year than upon their amount at any time of the year.

The variation of the rainfall from month to month is very apparent in both periods; the May and October "seasons" are well marked, but subject to great irregularities.

We have now to consider the rainfalls in the four divisions.

THE ANNUAL RAINFALL FOR EACH DIVISION FROM 1870 TO 1889.

YEAR.	Divisions.				The Island.
	N.E.	N.	W.C.	S.	
	Inches.	Inches.	Inches.	Inches.	Inches.
1870	110.60	83.09	102.98	61.07	89.43
1871	69.45	41.88	54.56	34.46	50.09
1872	59.42	40.79	51.50	29.02	45.18
1873	84.08	52.64	67.79	47.71	63.06
1874	97.18	68.25	62.97	47.35	68.94
1875	71.89	47.15	56.16	34.47	52.42
1876	90.38	54.71	87.33	52.99	71.35
1877	100.72	56.53	64.06	52.27	68.40
1878	104.12	62.99	72.44	66.11	76.42
1879	122.55	65.44	87.54	79.85	88.84
Means.	91.04	57.34	70.73	50.53	67.41
1880	76.37	47.01	64.91	33.47	55.44
1881	91.24	49.42	75.32	58.42	68.60
1882	65.48	43.76	78.59	43.67	57.87
1883	72.30	41.52	78.19	45.02	59.26
1884	69.00	41.87	73.10	43.63	56.90
1885	70.55	52.77	72.62	43.52	59.86
1886	126.61	60.98	88.21	86.64	90.61
1887	80.25	61.07	80.14	61.16	70.66
1888	98.00	54.42	70.43	65.58	72.11
1889	99.81	56.82	75.94	64.02	74.15
Means.	84.96	50.96	75.74	54.51	66.54

Here we see that the north-eastern division has the largest rainfall; then comes the west-central; then the northern; and lastly the southern.

But between the two decennial periods there was a curious shifting of the rainfall from the north-east and northern divisions to the west-central and southern divisions. In the second decennial period both the north-eastern and northern lost six inches, while the west-central gained five, and the southern gained four; so that the whole island lost somewhat less than one inch.

Such variations are due to the flood-rains chiefly falling in different localities.

The rainfall divisions were not arbitrarily made; the north-eastern and northern divisions of the Island have winter rains in November, December, and January; the north-eastern and west-central divisions have summer rains; and the southern division is dry, having rains for the most part only during the May and October seasons.

Now it so happens that when Dr. Hans Sloane* was in Jamaica, as physician to the Duke of Albemarle, Governor of Jamaica in the year 1687, he noticed the May and October rains; the winter rains on the north side, the summer rains on the central hills, and the small rainfall on the southern plains. Consequently the chief characteristics of the Jamaica rainfall have not altered for two hundred years.

It is not our present object, however, to consider the details of these rainfall divisions which are so useful for statistical purposes; we have rather to explain the Rainfall Maps, which are coloured so as to represent the rainfall over different areas for each month of the year, and for the year itself.

JANUARY.—Over the north-eastern part of the Island there are heavy winter rains of ten to fourteen inches, which diminish westwards and southwards, no doubt more gradually than is shown by the colouring; but an abrupt scale of colouring, such as that adopted, is necessary for the correct printing of the Maps and their subsequent use.

FEBRUARY.—The winter rains have nearly disappeared; the gauge at the Blue Mountain Peak alone showing heavy rainfall. And clearly this is the driest month of the year, although the effects, such as want of grass and water, are not, as a rule, felt until March.

MARCH.—Refreshing showers now sweep the central parts of the Island, leaving the northern and southern parts still very dry.

APRIL.—There are curious patches of colour in the east, and also in the west, where the west-central division now makes its appearance; and it will be noticed that the sources of the Black River (and perhaps those of the Great River) are replenished very distinctly.

MAY.—Very heavy rains fall in the parish of Portland; heavy rains fall over the central parts of the Island from east to west; and moderate rains fall on the northern and southern parts, with the exception of a very few places near the seashore. These rains are accompanied by thunder-storms, which continue to the end of September.

JUNE.—The rainfall this month exhibits strangely curved figures, and shows the necessity of Maps, however roughly drawn. More stations are required in the central parts of the Island in order to trace these outlines correctly.

* Afterwards Sir Hans Sloane, the founder of the British Museum. See his 'Natural History of Jamaica.'

JULY.—The rains are for the most part light and follow the central hills from east to west.

AUGUST.—Moderate rains fall in the north-eastern and west-central parts; and light rains fall over the rest of the Island.

SEPTEMBER.—The rains fall as in August.

OCTOBER.—Heavy rains fall over the north-eastern and west-central parts; and moderate rains fall over the rest of the Island. In April, June, August, and September we saw that the Island was divided into eastern and western rainfall regions by a central and drier part. This is more clearly marked in October; and it is difficult to explain. In Kingston the surface winds are from the south-east, and no doubt are generally strong enough to blow the rain-clouds inland; but this sea-breeze does not extend far inland; and in October the sea-breeze is light, lighter even than in May; so that this peculiar distribution cannot be due to surface winds. Neither is it due to mountain ranges; nor yet to local thunderstorms, because they abate during this month.

NOVEMBER.—A general subsidence now occurs, leaving us winter rains on the north-eastern division.

DECEMBER.—The winter rains increase. These, at least, we can understand; the winds now set in from the north-east, and deposit their moisture on the hills which oppose them, in Jamaica, as in every other country in the world where similar action occurs.

THE YEAR.—For this Map the scale of colouring is, of course, different from the scale for the Monthly Maps.

The distribution of the rainfall resembles that of October, and varies from thirty to thirty-five inches in a few places to over one hundred inches in the north-eastern division.

There are two stations in the west-central division where the rainfall is over one hundred inches, namely Great Valley and Windsor Forest; and at Brokenhurst, in Manchester, the rainfall is one hundred inches; but perhaps longer registration may reduce these figures, enlarged by recent flood-rains.

The driest stations are on the north-west and south-eastern shores; the four estates, Running Gut, Rose Hall, Success, and Cinnamon Hill, are remarkably dry, with strong surface winds from the east-north-east; and the land from Portland Point to Kingston is also remarkably dry, with strong surface winds from the south-east. And these dry localities confirm, as it were, the division of the Island into eastern and western rainfall regions by a central and drier part extending from Kingston to Rose Hall.

The utility of these Maps is sufficiently obvious; if the agriculturist wants constant and heavy rains, he will find them as a rule in the parishes of Portland and St. Mary; if he wants heavy summer rains, he will find them in the west-central parts of the Island; if he wants a moderate rainfall all the year round, he will find it in the area between Chapelton and Linstead, Albion and Cave Valley. Not that he will, perhaps, secure such rainfall in any one year; but that, taking one year with another for a series of years, he may count upon the rainfall laid down upon these Maps.

MAXWELL HALL.

Jamaica, 1891.

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE YEAR



Weather Report No. 124.

Inches of Rainfall



- Reference Nos.

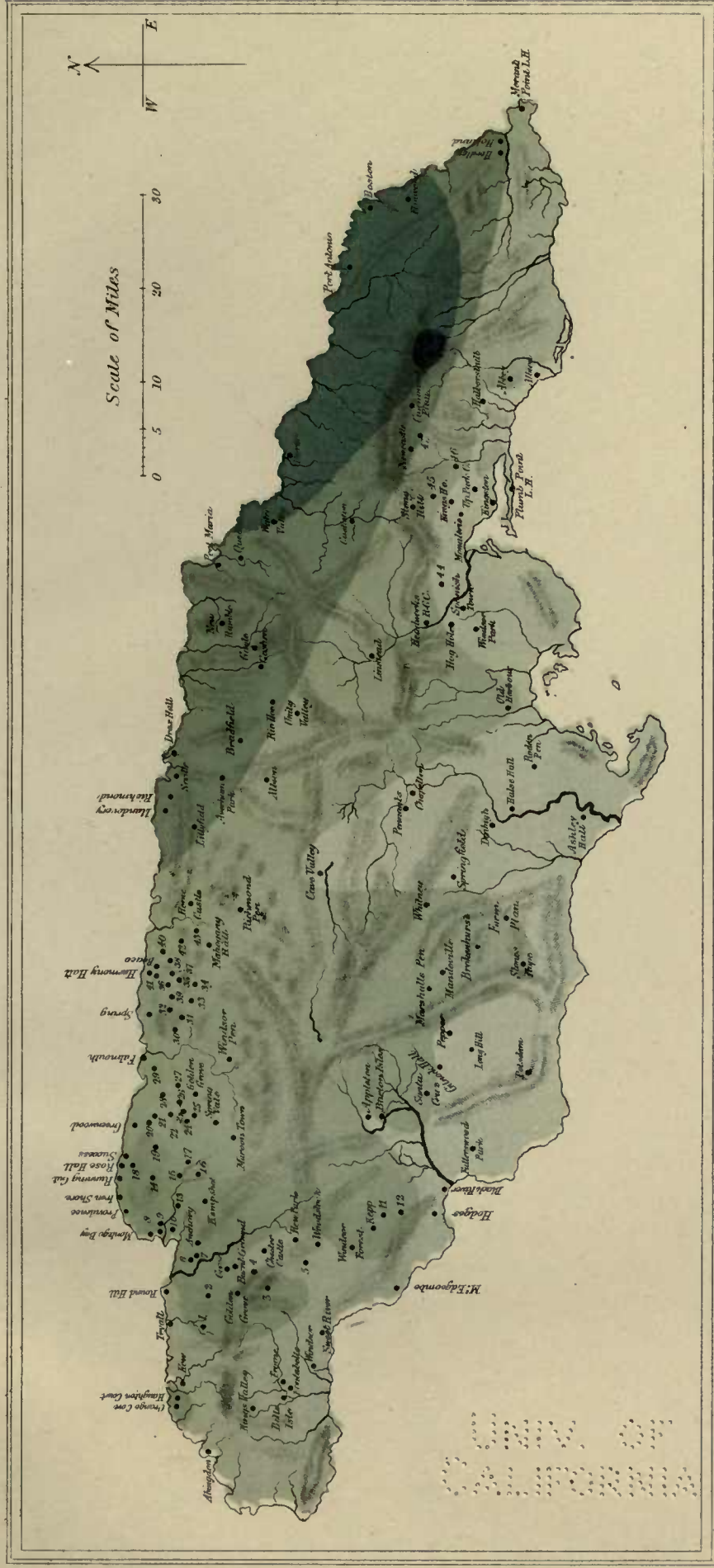
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- 2 Cannon Castle
- 3 Mackfield
- 4 Haughton Grove
- 5 Straie
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " Mount
- 10 Fainfield
- 11 Bloomsbury
- 12 M^r Charles
- 13 Irwin
- 14 Leggan
- 15 Latham
- 16 Salters Hill
- 17 Guilds'bre'
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gales Valley
- 25 Weston Favel
- 26 Tilsdon
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Colchis Pen
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Frampton Bryan
- 43 Hopswell
- 44 King's Cavanara
- 45 Cherry Garden
- 46 Hope Gards' Reservoir
- 47 Newton

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Reference Nos.

- 1 Great Valley
- 2 Cannon Castle
- 3 Mackfield
- 4 Haughton Grove
- 5 Strace
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " Mound
- 10 Fairfield
- 11 Bloomsbury
- 12 Mt Charles
- 13 Irwin
- 14 Laegua
- 15 Larkine
- 16 Slaters Hill
- 17 Gaultsbury
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gates Valley
- 25 Weston Favel
- 26 Tils-ton
- 27 Pentroche
- 28 Green Park
- 29 Holland Pen
- 30 Lollery
- 31 Cambridge
- 32 Oxford
- 33 Gibbollar
- 34 Hyde
- 35 Coleridge Pen
- 36 Georgia
- 37 Vale Royal
- 38 Acadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Drumpion Bryan
- 43 Hopewell
- 44 Fingers Caymanas
- 45 Cherry Garden
- 46 Hope Gardens Reservoir
- 47 Newton

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF JAN.



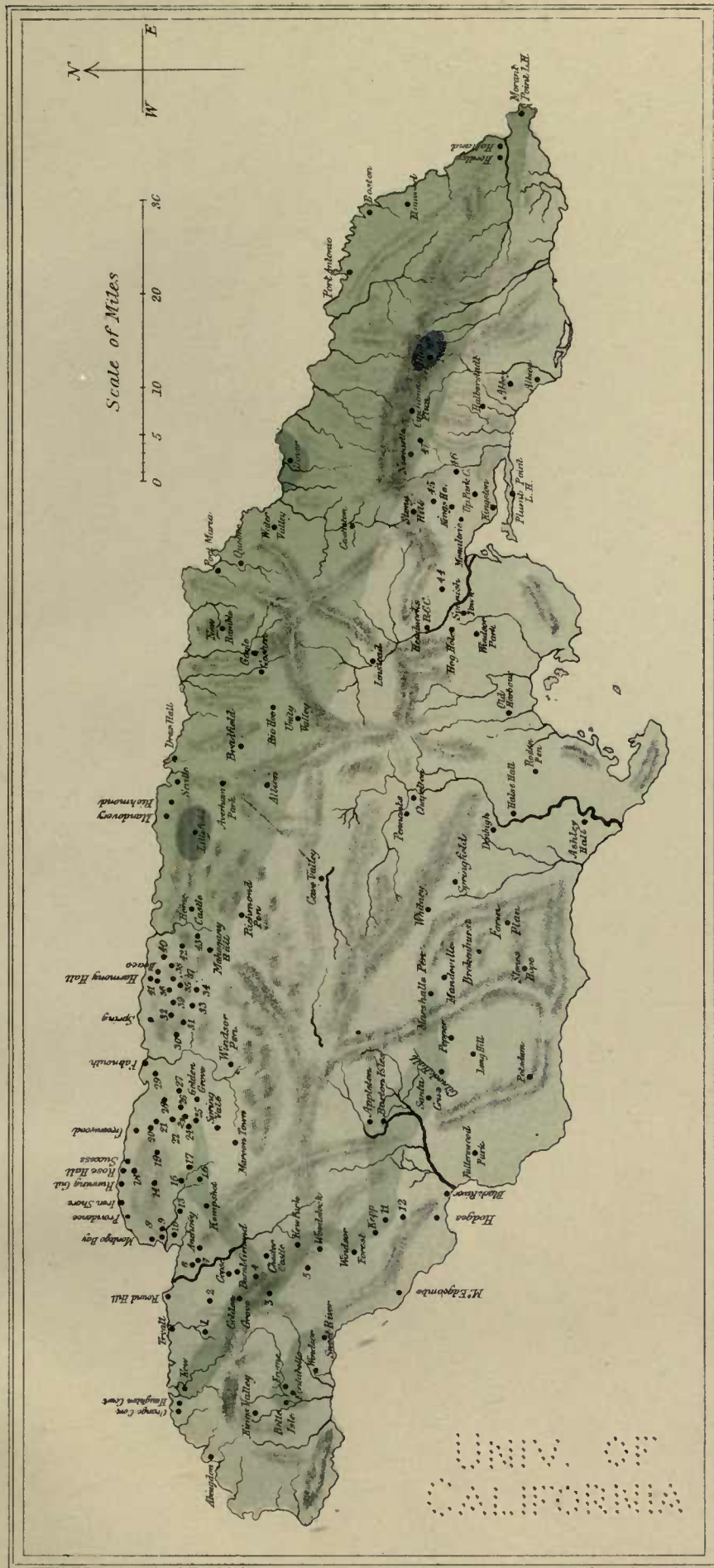
Weather Report No. 124

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Reference Nos.

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- 2 Caecon Castle
- 3 Macfield
- 4 Houghton Grove
- 5 Strate
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 Mount
- 10 Fairfield
- 11 Bloombury
- 12 St Charles
- 13 Irwin
- 14 Leegan
- 15 Iatum
- 16 Satters Hill
- 17 Gullsbrook
- 18 Cinnamon Hill
- 19 Cental
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gales Valley
- 25 Western Ford
- 26 Titelon
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Colchis Pen.
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Brimpton Bryan
- 43 Hopewell
- 44 Ewing's Caymans
- 45 Cherry Garden
- 46 Hope Garden Reservoir
- 47 Newton

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF FEB.



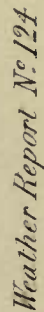
Weather Report No. 124

Inches of Rainfall



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MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF MARCH



Inches of Rainfall

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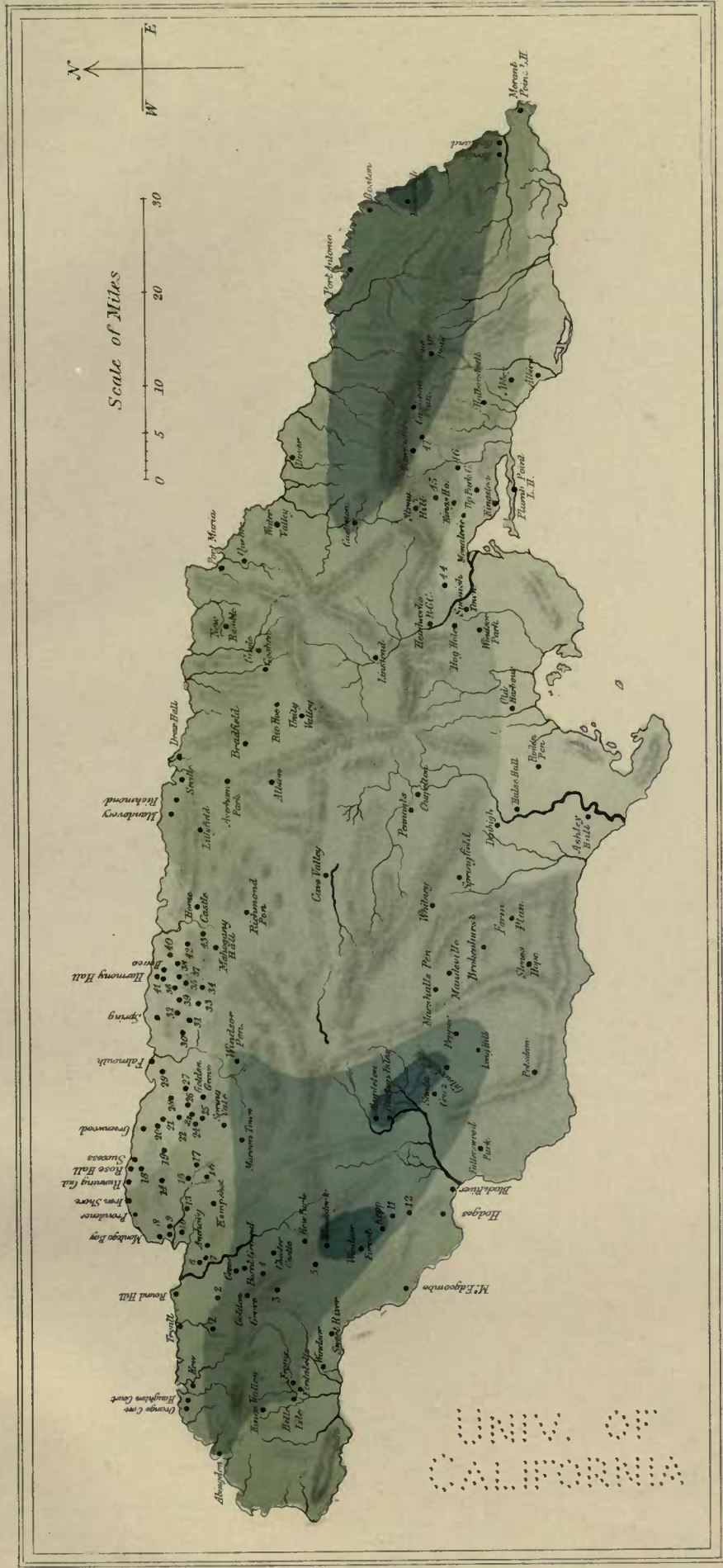
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| 5 | Strate |
| 6 | Wiltshire |
| 7 | Eden |
| 8 | Catherine Hall |
| 9 | " Mount |
| 10 | Fairfield |
| 11 | Elmsbury |
| 12 | Mt Charles |
| 13 | Inwin |
| 14 | Leagan |
| 15 | Latum |
| 16 | Salters Hill |
| 17 | Gullstro'. |
| 18 | Cinnamon Hill |
| 19 | Content |
| 20 | Kent |
| 21 | Orange Valley |
| 22 | Dundee |
| 23 | Phanix |
| 24 | Gales Valley |
| 25 | Weston Ford |
| 26 | Tilton |
| 27 | Pembroke |
| 28 | Green Park |
| 29 | Holland Pen |
| 30 | Lottory |
| 31 | Cambridge |
| 32 | Oxford |
| 33 | Gibraltar |
| 34 | Hyde |
| 35 | Colchia Pen |
| 36 | Georgia |
| 37 | Vale Royal |
| 38 | Arcaid |
| 39 | Steelefield |
| 40 | Bryan Cottle |
| 41 | Lancaster |
| 42 | Erampton Bryan |
| 43 | Hopewell |
| 44 | Living's Caymanas |
| 45 | Cherry Garden |
| 46 | Hope Gardall Reservoir |
| 47 | Newton |

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Reference Nos.

- 1 Great Valley
- 2 Caecon Castle
- 3 Molefield
- 4 Haughton Grove
- 5 Strate
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " Mount
- 10 Fairfield
- 11 Bloomshury
- 12 Mt Charles
- 13 Irwin
- 14 Leagan
- 15 Latham
- 16 Satters Hill
- 17 Gillsbro'
- 18 Cinnamon Hill
- 19 Centent
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gales Valley
- 25 Weston Favel
- 26 Tilston
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibbular
- 34 Hyde
- 35 Colchia Pen
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Brumpton Bryan
- 43 Hopewell
- 44 Ewing's Camanias
- 45 Cherry Garden
- 46 Hope Gard & Reservoir
- 47 Neulton

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF APRIL

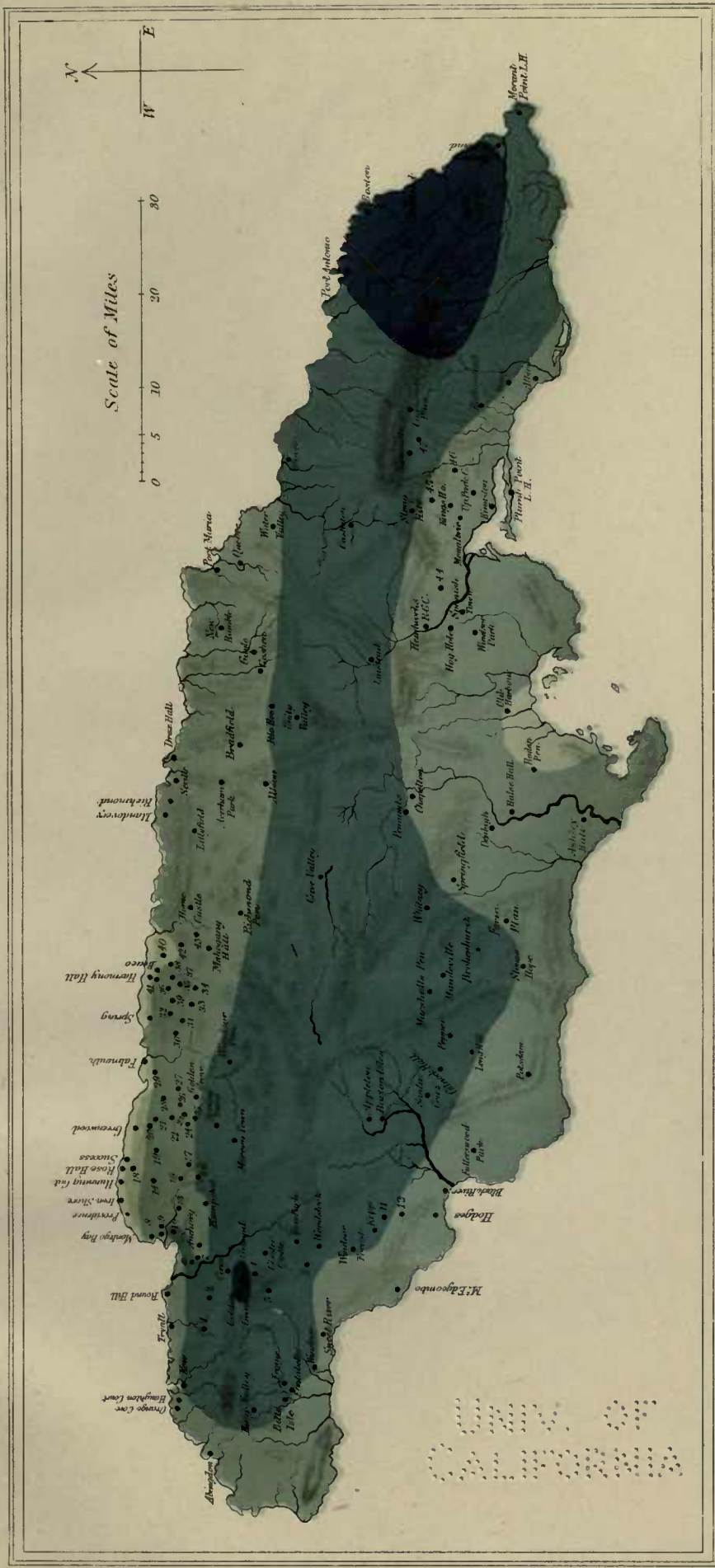


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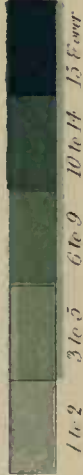
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- 4 Haughton Grove
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- 8 Catherine Hall
- 9 Mount
- 10 Fairfield
- 11 Bloomsbury
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- 13 Irwin
- 14 Leegan
- 15 Lakum
- 16 Saters Hill
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- 20 Kent
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- 22 Dundee
- 23 Phoenix
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- 25 Weston Favel
- 26 Tiltton
- 27 Pembroke
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- 29 Hilland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Coleridge Pen
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 Steel Field
- 40 Bryan Castle
- 41 Lancaster
- 42 Brompton Bryan
- 43 Hopewell
- 44 Eutopia Caymanas
- 45 Cherry Garden
- 46 Hope Garden Reservoir
- 47 Newton

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF MAY

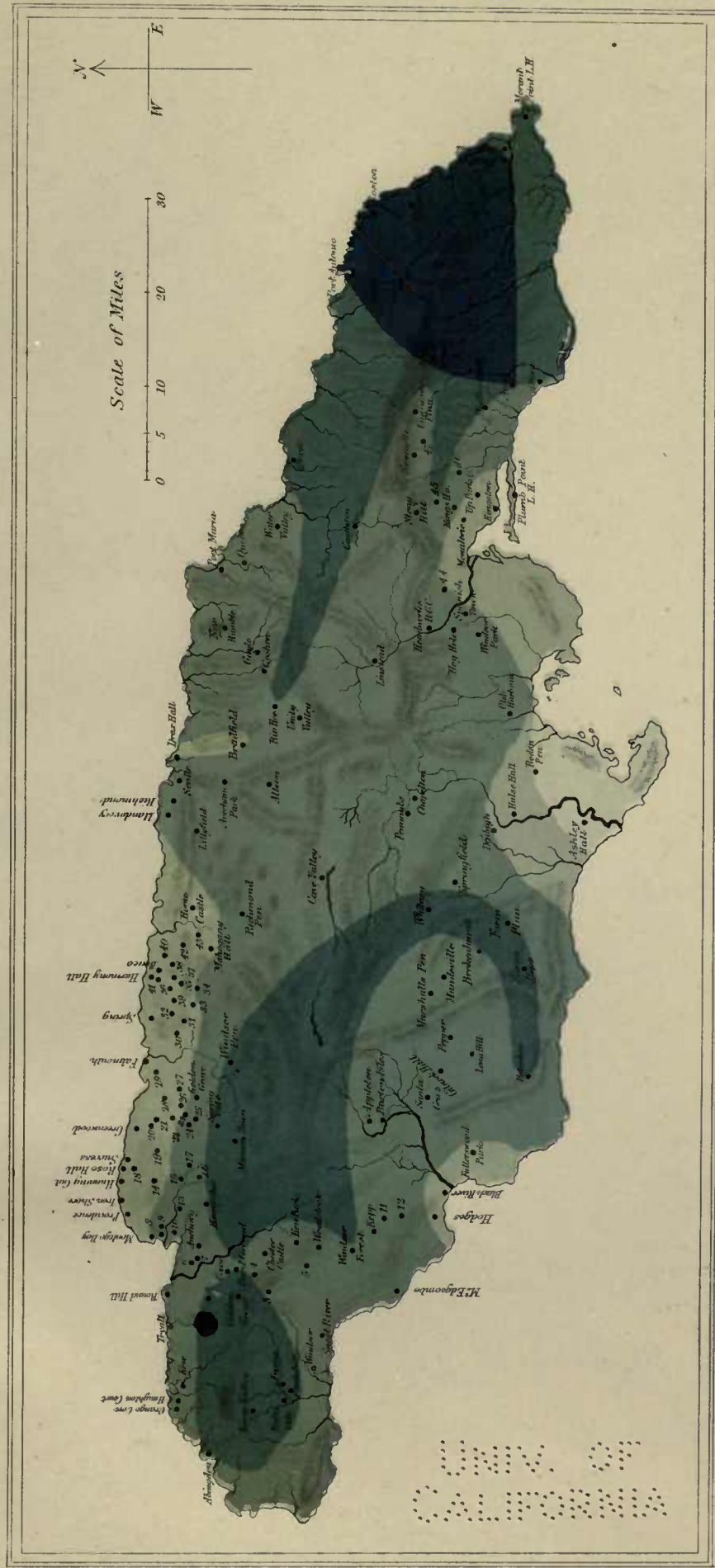


Inches of Rainfall



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MAP SHOWING THE AVERAGE RAINFALL, OVER JAMAICA FOR THE MONTH OF JUNE



Weather Report No 124

Inches of Rainfall



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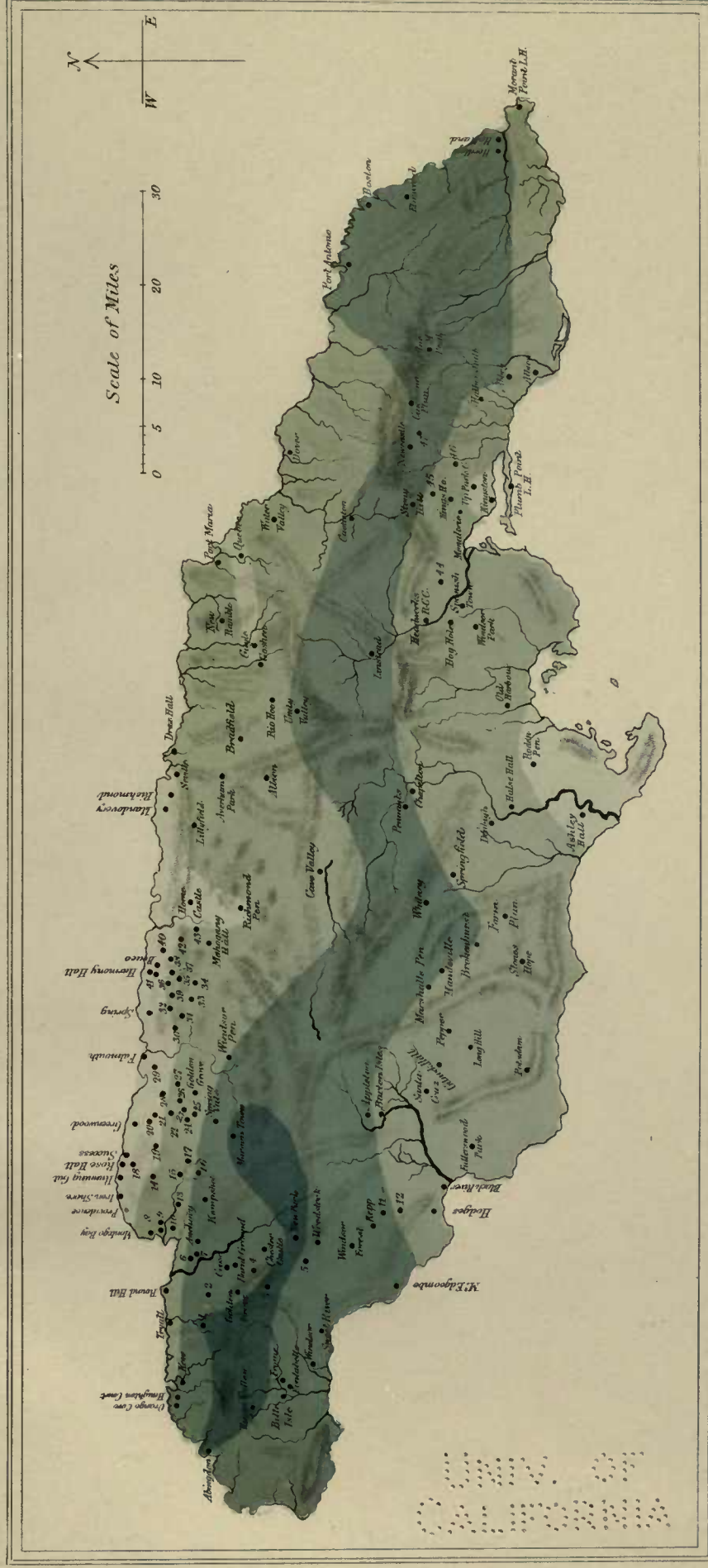
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| 7 | Eiden |
| 8 | Catherine Hall |
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| 10 | Fairfield |
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| 12 | St Charles |
| 13 | Irwin |
| 14 | Leegom |
| 15 | Lodium |
| 16 | Salters Hill |
| 17 | Guthscre' |
| 18 | Cinnamon Hill |
| 19 | Centent |
| 20 | Kent |
| 21 | Orange Valley |
| 22 | Dundee |
| 23 | Phonix |
| 24 | Gates Valley |
| 25 | Weston Ford |
| 26 | Tilsdon |
| 27 | Pembroke |
| 28 | Green Park |
| 29 | Holland Pen |
| 30 | Lodtery |
| 31 | Cambridge |
| 32 | Oxford |
| 33 | Gibbollar |
| 34 | Hyde |
| 35 | Colchis Pen |
| 36 | Georgie |
| 37 | Vale Royal |
| 38 | Aradica |
| 39 | Steeffield |
| 40 | Dryan Castle |
| 41 | Lawender |
| 42 | Warrington Hyman |
| 43 | Haywell |
| 44 | Enings Common |
| 45 | Cherry Garden |
| 46 | Hope Gards & Reservoir |
| 47 | Newton |

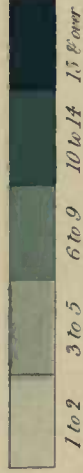
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- 1 Great Valley
- 2 Caneon Castle
- 3 Macfield
- 4 Haughton Grove
- 5 Strac
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " " Mount
- 10 Fairfield
- 11 Bloombury
- 12 Mt Charles
- 13 Irwin
- 14 Leagan
- 15 Lakun
- 16 Sallers Hill
- 17 Chillsbro'
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dunce
- 23 Phoenix
- 24 Gale's Valley
- 25 Weston Favel
- 26 Tilston
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 C. elchia Pen
- 36 Georgia
- 37 Yale Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Brumpton Bryan
- 43 Hopewell
- 44 Ewing's Cavmanas
- 45 Cherry Garden
- 46 Hope Gard & Reservoir
- 47 Newlon

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF JULY



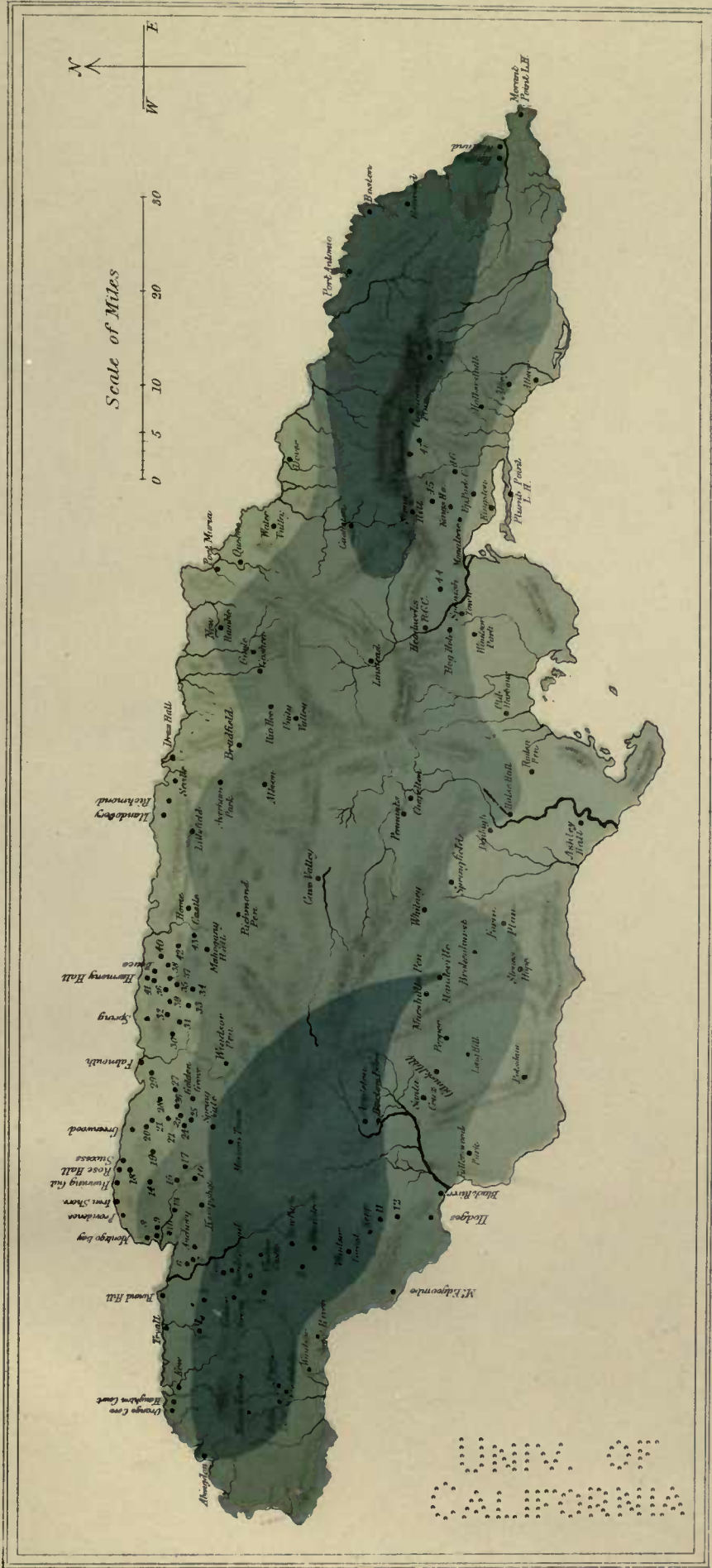
Inches of Rainfall



Reference Nos.

- 1 Great Valley
- 2 Caroon Castle
- 3 Machfield
- 4 Haughton Grove
- 5 Strait
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 Fairfield
- 10 Fairfield
- 11 Bloombury
- 12 Mt Charles
- 13 Irwin
- 14 Leegan
- 15 Latum
- 16 Salters Hill
- 17 Gullsbrook
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gale's Valley
- 25 Weston Favel
- 26 Tilston
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Conchita Pen
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 St. David
- 40 Bryan Castle
- 41 Lancaster
- 42 Brumpton Bryan
- 43 Hopewell
- 44 Fung's Caymanas
- 45 Cherryfield
- 46 Hope Gardens
- 47 Newlon

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF AUG.

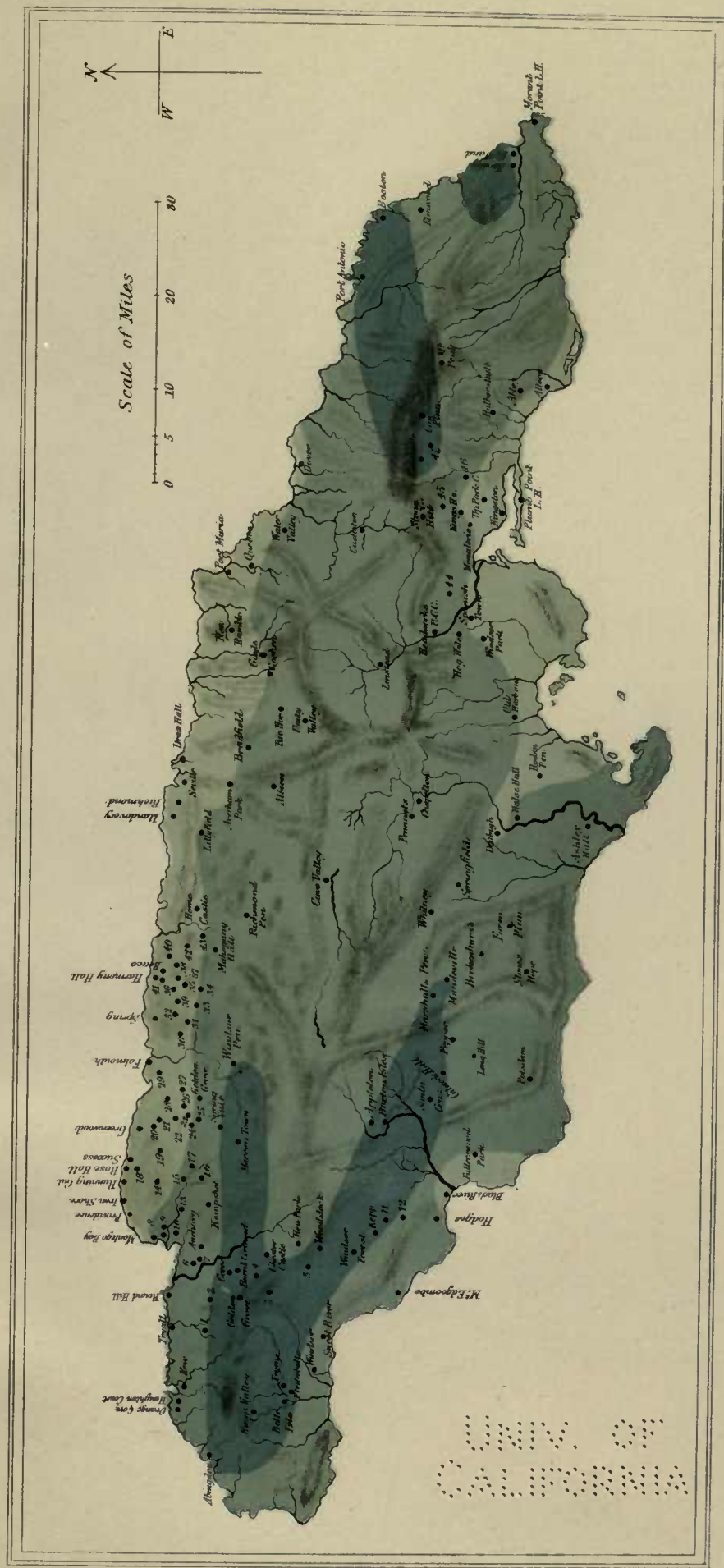


UNIV. OF
CALIFORNIA

Reference Nos.

- 1 Great Valley
- 2 Caneon Castle
- 3 Macfield
- 4 Haughton Grove
- 5 Strate
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " Mount
- 10 Fairfield
- 11 Bloomsbury
- 12 Mr Charles
- 13 Irwin
- 14 Leagon
- 15 Latium
- 16 Salters Hill
- 17 Gullshire
- 18 Cinnamon Hill
- 19 Continent
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gale's Valley
- 25 Western Favel
- 26 Tilsdon
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lollery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Colchis Pen
- 36 Georgia
- 37 Palo Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Brumpton Bryan
- 43 Hopewell
- 44 Eriago Caymanas
- 45 Cherry Garden
- 46 Hope Gard Reserve
- 47 Newdon

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF SEPT.



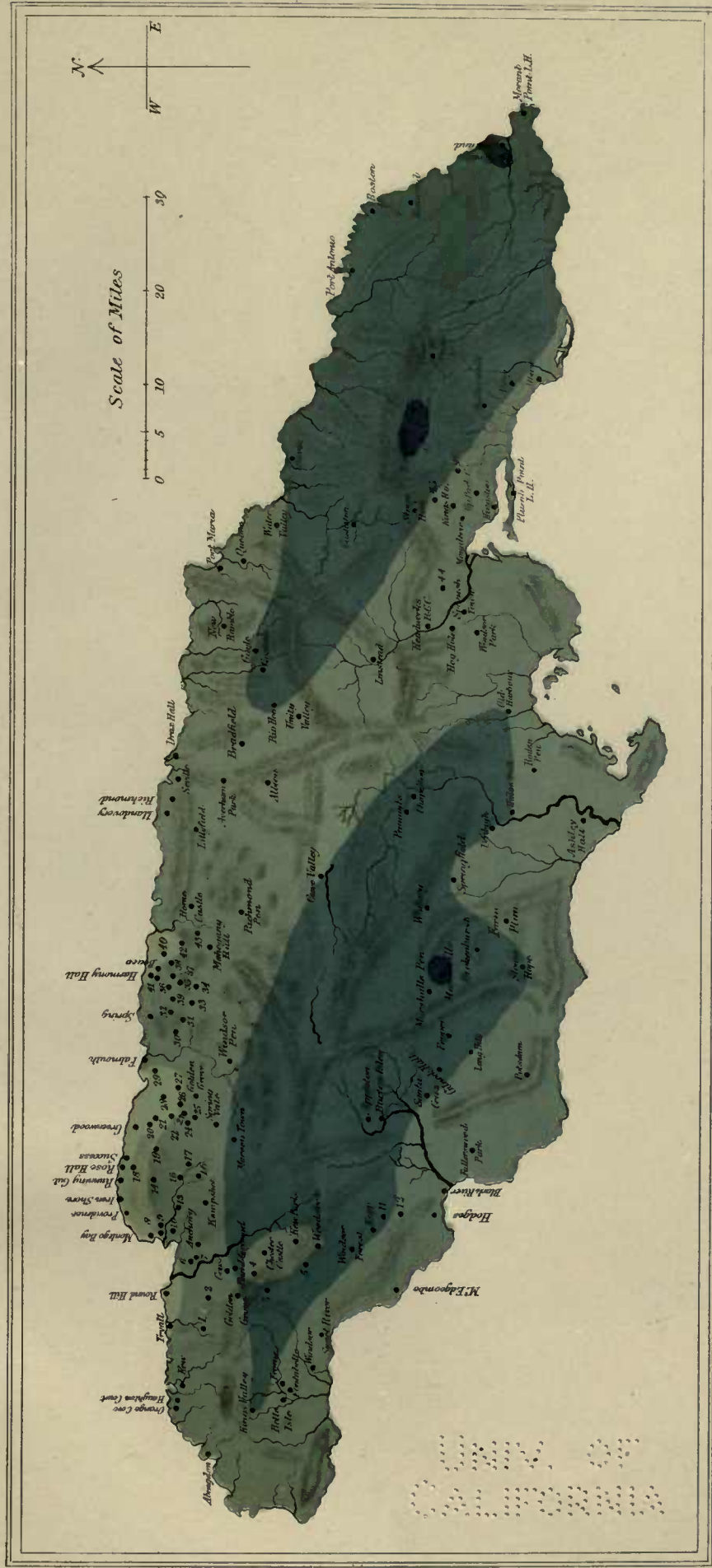
Inches of Rainfall



Reference Nos.

- 1 Great Valley
- 2 Cacoen Castle
- 3 Macfield
- 4 Haughton Grove
- 5 Strate
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hill
- 9 " Mount
- 10 Fairfield
- 11 Bloombury
- 12 Mt Charles
- 13 Irwin
- 14 Leagan
- 15 Latum
- 16 Sallers Hill
- 17 Gullsbro'
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phaeax
- 24 Gales Valley
- 25 Weston Fivel
- 26 Tilston
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 C. de la Pen
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Brampton Bryan
- 43 Hopewell
- 44 Fing's Carmanas
- 45 Cherry Garden
- 46 Hope Gards Reservoir
- 47 Newton

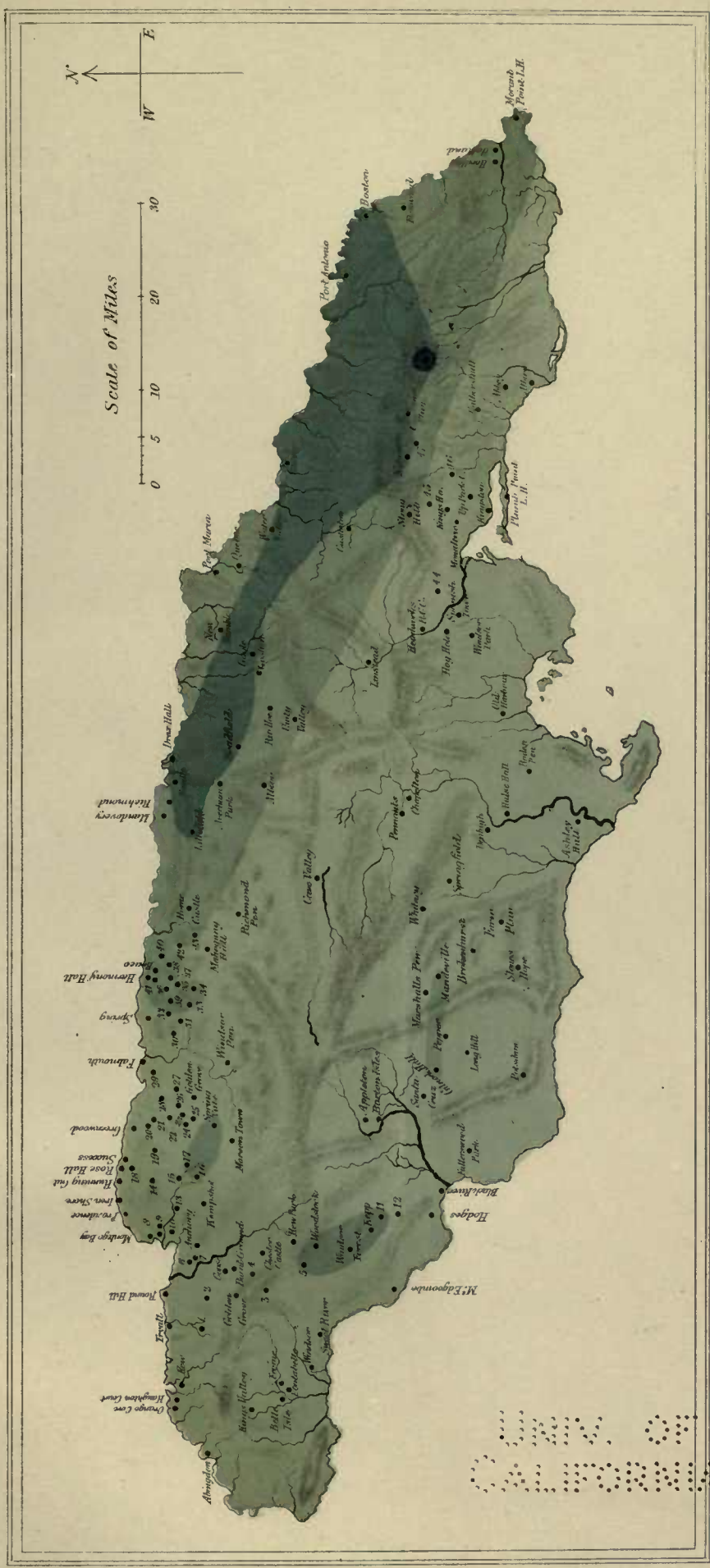
MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF OCT.



Reference Nos.

- 1 Great Valley
- 2 Cocoa Castle
- 3 Macfield
- 4 Haughton Grove
- 5 Strane
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " Mount
- 10 Fairfield
- 11 Bloomsbury
- 12 Mt Charles
- 13 Irwin
- 14 Leagar
- 15 Ladnam
- 16 Sutters Hill
- 17 Gullsbrow
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gates Valley
- 25 Weston Favel
- 26 Tilston
- 27 Pembroke
- 28 Green Park
- 29 Holland Pen
- 30 Lottery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Colchin Pen
- 36 Georgia
- 37 Vale Royal
- 38 Arcadia
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Brumpton Bryan
- 43 Hopswell
- 44 Ewing's Caymans
- 45 Cherry Garden
- 46 Hope Gardens Reservoir
- 47 Newton

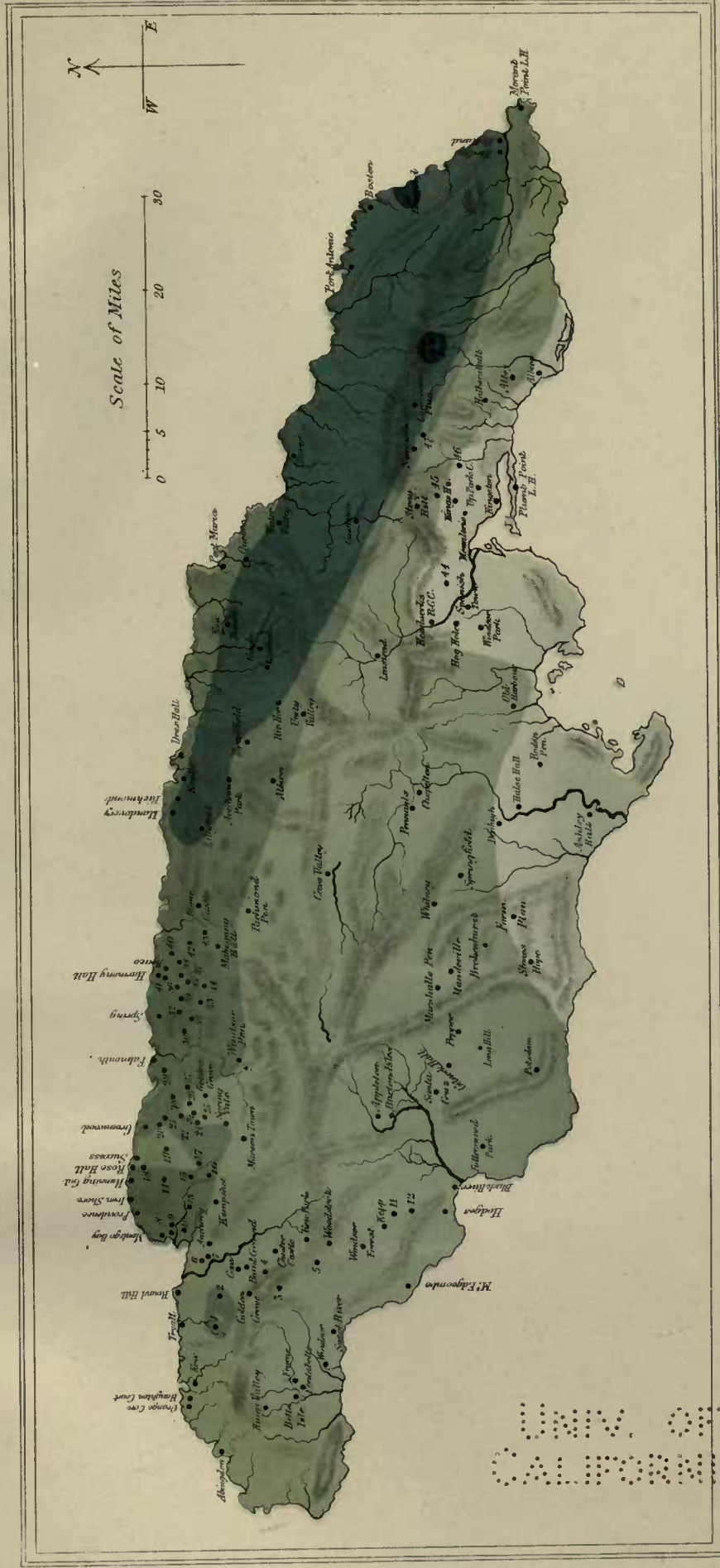
MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF NOV.



Reference Nos.

- 1 Great Valley
- 2 Cañon Castle
- 3 Macfield
- 4 Houghton Grove
- 5 Struie
- 6 Wiltshire
- 7 Eden
- 8 Catherine Hall
- 9 " " Mead
- 10 Fairfield
- 11 Bloomsbury
- 12 Mt Charles
- 13 Irwin
- 14 Leagan
- 15 Latham
- 16 Salters Hill
- 17 Galsbro'
- 18 Cinnamon Hill
- 19 Content
- 20 Kent
- 21 Orange Valley
- 22 Dundee
- 23 Phoenix
- 24 Gales Valley
- 25 Weston Favel
- 26 Tilsdon
- 27 Peabroke
- 28 Green Park
- 29 Holland Pen
- 30 Lattery
- 31 Cambridge
- 32 Oxford
- 33 Gibraltar
- 34 Hyde
- 35 Calchin Pen
- 36 Georgia
- 37 Vale Royal
- 38 Andria
- 39 Steelfield
- 40 Bryan Castle
- 41 Lancaster
- 42 Birmingham Bryan
- 43 Hopewell
- 44 Exigua Caymanas
- 45 Cherry Garden
- 46 Hope Garden Reservoir
- 47 Neuton

MAP SHOWING THE AVERAGE RAINFALL OVER JAMAICA FOR THE MONTH OF DEC.



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